



Does money buy strong performance in PISA?

- Greater national wealth or higher expenditure on education does not guarantee better student performance. Among high-income economies, the amount spent on education is less important than how those resources are used.
- Successful school systems in high-income economies tend to prioritise the quality of teachers over the size of classes.
- School systems that perform well in PISA believe that all students can achieve, and give them the opportunity to do so.

In education, as in everything else in life, you get what you pay for. Right? Well, as in everything else in life: not necessarily. As many OECD governments are poised to trim public budgets and cut expenditures, parents, educators and policy makers can take some comfort from PISA findings that show that the success of a country's education system depends more on how educational resources are invested than on the volume of investment. The countries that are the strongest performers in PISA are not the wealthiest, nor do they allocate more money to education.

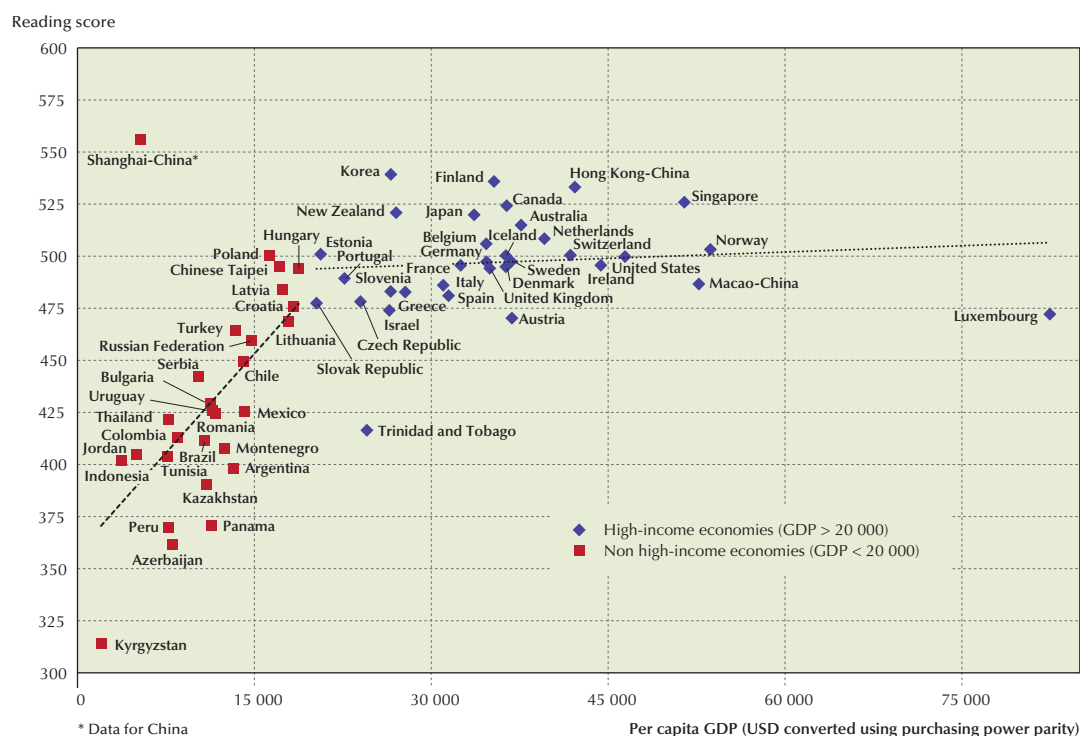
National wealth is important...up to a point.

At first glance, it might seem that a country's wealth is related to how well it does in PISA. Among moderately wealthy economies whose per capita GDP is up to around USD 20 000 (such as Estonia, Hungary, the Slovak Republic and the partner country Croatia), the greater the country's wealth, the higher its mean score on the PISA reading test. For example, in Poland, the partner country Latvia and the partner economy Chinese Taipei, the per capita GDP is at least twice as high as that of the partner countries Azerbaijan and Peru — and their mean scores in the PISA reading assessment are more than 100 points higher.


But PISA results suggest that above this threshold of USD 20 000 in per capita GDP, national wealth is no longer a predictor of a country's mean performance in PISA. The amount these high-income countries spend on education is similarly unrelated to their performance in PISA. A country's/economy's cumulative expenditure on education is the total dollar amount spent on educating a student from the age of 6 to the age of 15. After a threshold of about USD 35 000 per student, that expenditure is

unrelated to performance. For example, countries that spend more than USD 100 000 per student from the age of 6 to 15, such as Luxembourg, Norway, Switzerland and the United States, show similar levels of performance as countries that spend less than half that amount per student, such as Estonia, Hungary and Poland. Meanwhile, New Zealand, a top performer in PISA, spends a lower-than-average amount per student from the age of 6 to 15.


Average reading performance in PISA and national wealth (per capita GDP)



Source: *PISA 2009 Results: What Students Know and Can Do: Student Performance in Reading, Mathematics and Science*, Table I.2.3

StatLink  <http://dx.doi.org/10.1787/888932381399>

PISA 2009 Results: What Makes a School Successful? Resources, Policies and Practices, Table IV.3.21c.

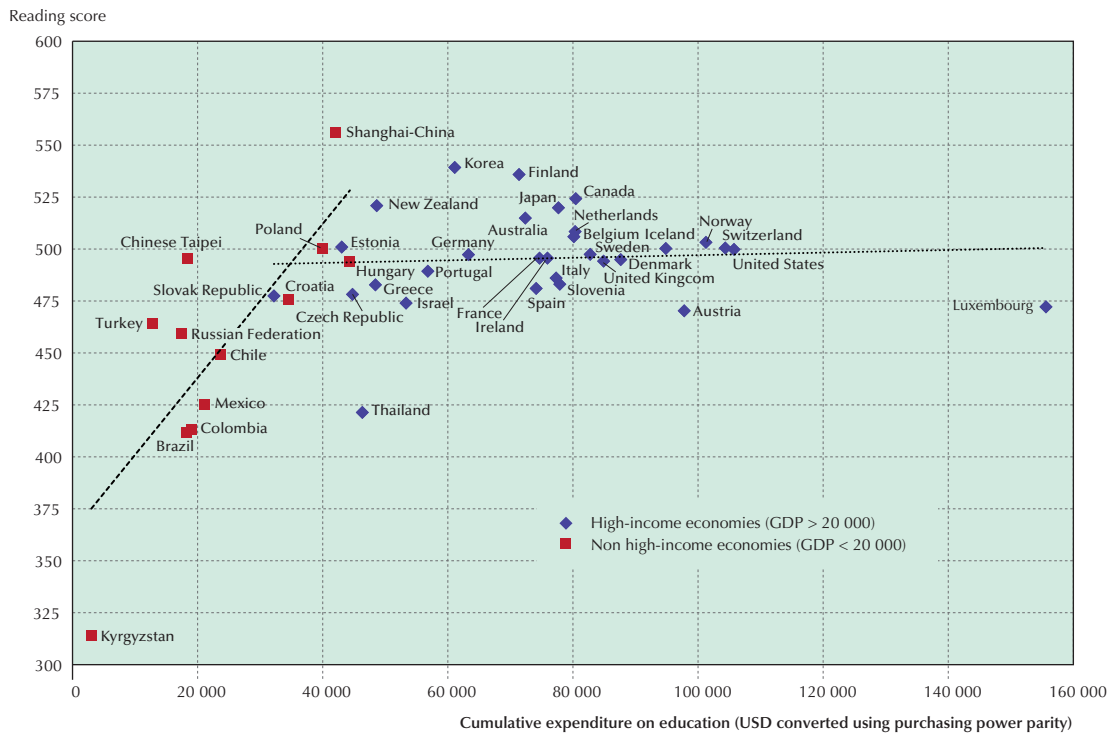
StatLink  <http://dx.doi.org/10.1787/888932382216>

Note: Albania, Dubai (UAE), Liechtenstein and Qatar did not report per capita GDP data.

What, then, contributes to better performance among high-income countries and economies? PISA results suggest that, in these countries, what matters more is *how the resources are spent* rather than *how much is spent*.



Average reading performance in PISA and average spending per student from the age of 6 to 15



Source: PISA 2009 Results: What Students Know and Can Do: Student Performance in Reading, Mathematics and Science, Table I.2.3

StatLink <http://dx.doi.org/10.1787/888932381399>

PISA 2009 Results: What Makes a School Successful? Resources, Policies and Practices, Table IV.3.21b.

StatLink <http://dx.doi.org/10.1787/888932382216>

Note: Twenty-three partner countries and economies did not report data on cumulative expenditures.

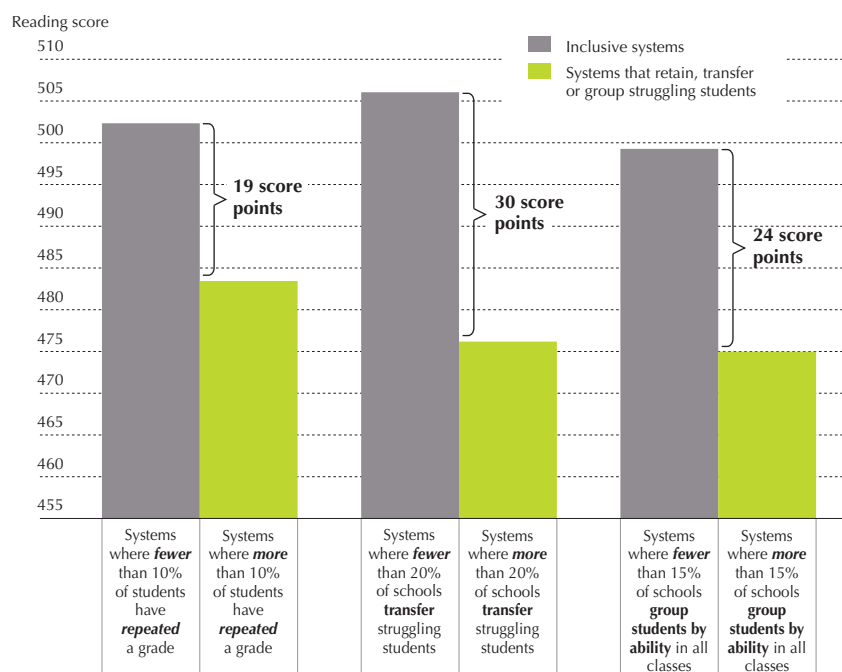
A school system's attitudes towards teachers and students have a greater impact on student performance.

The strongest performers among high-income countries and economies tend to invest more in teachers. For example, lower secondary teachers in Korea and the partner economy Hong Kong-China, two high-performing systems in the PISA reading tests, earn more than twice the per capita GDP in their respective countries. In general, the countries that perform well in PISA attract the best students into the teaching profession by offering them higher salaries and greater professional status.

This relationship between performance and teachers' salaries does not hold among less wealthy countries and economies, however.

In all PISA-participating countries and economies, school systems that invest in higher teachers' salaries tend to have larger classes. At the country level, PISA finds that the size of the class is unrelated to the school system's overall performance; in other words, high-performing countries tend to prioritise investment in teachers over smaller classes.

Average PISA reading performance of OECD countries that retain, transfer or group struggling students and countries that offer inclusive education



Source: PISA 2009 Results: What Students Know and Can Do: Student Performance in Reading, Mathematics and Science, Table I.2.3

StatLink <http://dx.doi.org/10.1787/888932381399>

PISA 2009 Results: What Makes a School Successful? Resources, Policies and Practices, Tables IV.3.1, IV.3.3a, and IV.3.4.

StatLink <http://dx.doi.org/10.1787/888932382216>

Successful PISA countries also invest something else in their education systems: high expectations for *all* of their students. Schools and teachers in these systems do not allow struggling students to fail; they do not make them repeat a grade, they do not transfer them to other schools, nor do they group students into different classes based on ability. Regardless of a country's or economy's wealth, school systems that commit themselves, both in resources and in policies, to ensuring that all students succeed perform better in PISA than systems that tend to separate out poor performers or students with behavioural problems or special needs.

The bottom line: Money alone can't buy a good education system. Strong performers in PISA are those countries and economies that believe – and act on the belief – that all children can succeed in school. Among wealthier economies, those that prioritise the quality of teachers over smaller classes tend to show better performance. When it comes to money and education, the question isn't *how much?* but rather *for what?*

For more information

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See *PISA 2009 Results: What Makes a School Successful? Resources, Policies and Practices (Vol. IV)*

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